Black-tailed Prairie Dogs...

A North Dakota Game and Fish Department Perspective

By Jeb Williams Photos by Harold Umber

Prairie dog management is a relatively new responsibility for the Game and Fish Department. In the past, Department personnel periodically tried to record and estimate the statewide black-tailed prairie dog population, but that was about it.

Currently there is pressure toward the Department to increase management to a level similar to that given game species. Increased management of a species considered by many some as a disease-carrying pest presents considerable challenges for Game and Fish.

The goal of the state management plan is to maintain a viable population of black-tailed prairie dogs. The call for increased prairie dog management surfaced in July 1998 with a petition by the National Wildlife Federation to list the black-tailed prairie dog under the Endangered Species Act as "threatened." In March 1999, representatives from 11 Great Plains state wildlife agencies gathered in Denver to discuss options to deal with the possibility of having black-tailed prairie dogs listed under the Endangered Species Act.

In January 2000, following a nine-month review process by the U.S. Fish and Wildlife Service, the NWF's request for threatened status was denied, although the service did issue a "warranted but precluded" decision. This means the species met the criteria for listing but it was precluded by work on higher priority species under the Endangered Species Act. The black-tailed prairie dog was designated as a candidate species for listing, with annual review to determine if upgrading to threatened or endangered is necessary.

The Department became involved with the organization of a state advisory group in 1999. This group included representatives from state and federal agencies, farm and ranch groups and hunters. Members were to advise the Department on future management of prairie dogs and how that management could affect the various interests they represented.

The Department hosted the first advisory group meeting in September 1999. The first major issue was a multi-state regional conservation agreement calling for increased state management of prairie dogs, with specific goals and objectives. The Game and Fish Department needed to decide if signing the regional agreement was the best option to avoid the species being listed.

The advisory group strongly opposed the Game and Fish Department signing the regional agreement and felt developing a smaller state plan would be in everyone's best interest. By signing the regional document, Department administrators felt it would send false signals to other state agencies that North Dakota was committed to the agreement, and had the resources to accomplish these goals.

Following the first advisory group meeting, the Department developed a draft state prairie dog plan. In December 1999, the advisory group discussed this first draft, and agreed that maintaining a viable population of prairie dogs seemed like a good starting point.

Population viability is defined as the number of prairie dogs required to sustain a prairie dog population on a long-term basis without fear of extinction or loss of genetic diversity. It is important to remember that a biologically viable prairie dog population may be far below the levels needed to sustain black-footed ferrets, burrowing owls, or other species that may depend on prairie dog colonies for food and shelter. While population viability also does not address historic numbers and acreage, it does address the requirements necessary for maintaining the species.

Dr. Craig Knowles, of FaunaWest Wildlife Consultants was hired to develop a viability analysis of

prairie dogs in North Dakota. Dr. Knowles has dedicated his life to the grassland ecosystem of the northern Great Plains and black-tailed prairie dog research. In a summary from the analysis Knowles quoted, "All existing information on prairie dog population trends in North Dakota would indicate that there are currently viable prairie dog populations in North Dakota provided plague does not become a significant factor. Although the prairie dog is not threatened with extinction in North Dakota, there is need for conservation efforts to maintain or recover prairie dog populations. This is especially significant for the associated species. Mapping data shows that the North

Dakota prairie dog

distribution is split into two main segments. One in the Little Missouri corridor and the other in Sioux County in the south-central portion of the state. Small isolated colonies and complexes exist between these two populations and special management attention may be required to sustain these isolated colonies over the long-term."

The completed analysis provided a template for the Department to complete its state management plan in November 2001.

Management Plan Action Items

Monitoring – The goal of the state plan is to maintain a viable black-tailed prairie dog population. In order to accomplish this goal, we had to determine relative abundance and distribution. The most recent statewide survey was an aerial survey completed by the U.S. Forest Service and Northern Prairie Wildlife Research Center in 1999. That survey estimated approximately 30,000 acres of prairie dogs in North Dakota. However, the accuracy of that survey method has been questioned and Game and Fish felt a more accurate survey was needed. Dr. Knowles was contracted to complete an additional statewide survey. The aerial portion of the survey is complete and Dr. Knowles is currently ground-truthing each prairie dog town to determine activity and acreage. He will also provide the

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Department with recommendations to adequately sub-sample the statewide population every three years – a key component in identifying and tracking population changes.

Nonresident shooting – North Dakota's neighboring states, South Dakota and Montana, have placed restrictions on recreational shooting of prairie dogs. This may make North Dakota a more desirable destination for those interested in shooting prairie dogs. The Game and Fish Department will monitor nonresident licenses to determine if North Dakota experiences an increased number of prairie dog shooters. If we document increased shooting pressure, the Department will need to determine if it is threatening the plan goal of maintaining a viable population.

Forage Competition – Forage competition between prairie dogs and cattle has always been a concern. This competition is assumed by some to be solely negative and in direct competition with grazing. Others feel there is no competition and the forage production is actually greater on prairie dog towns. The correct answer probably lies somewhere between. The Game and Fish Department has contacted North Dakota State University, Montana State University, and the U.S. Forest Service Experiment Station in South Dakota to help draft a study proposal that assesses the effect prairie dogs have on

rangelands and grazing interests in North Dakota. Game and Fish will fund the study to collect accurate information, specifically representing North Dakota's climate and soil conditions.

Consulting Advisory Group – Although the state management plan is completed, we anticipate future changes and adjustments. Some of these adjustments may include but are not limited to: landowner-incentive funding, plague issues, monitoring, and sharing of completed research work.

Regulation Authority – The Game and Fish Department has the ability to place restrictions on the taking of prairie dogs and will do so if shooting is threatening the state's viable population status. While shooting currently does not appear to have a significant biological impact in North Dakota, shooting restrictions in other states may cause a large enough influx of nonresidents to change this scenario.

Associated Species – A number of species have adapted over time to live in association with prairie dogs. However, the state plan is specific to management of prairie dogs. The black-footed ferret, burrowing owl, ferruginous hawk, and other species closely associated with prairie dogs will require further research separate from this plan.

Private Landowner Incentive Program –

Some interests believe that in order to increase prairie dog populations, a landowner incentive program is necessary. The Department supports the concept of incentive programs, however, the specifics of how such a program would be administered or structured are not yet determined. Before the Game and Fish Department would endorse an incentive program, agency personnel would need to review its practicality in our state.

Public

Outreach/Education – Education is important to prairie dog management. Much has been learned about the importance of prairie dog colonies to other prairie species. Accurate information will help achieve a balanced view of the ecological role and economic impacts of prairie dogs in North Dakota. This is a difficult task. We must remember that government agencies led the way to exterminating hundreds of prairie dog towns. Just 15 years ago, government agencies were actively poisoning prairie dogs. Now an incentive program is being considered to pay landowners to replace the earlier poisoned colonies.

Conclusion

The Game and Fish Department approached the black-tailed prairie dog management issue cautiously and honestly, and determined it simply is not at the top of its priority list. However, our Department is optimistic about the future. Two nongame biologists were recently added to the staff to ensure more time is spent developing baseline information on prairie dogs and many other nongame species. This will allow us to focus on species that might be in need of management. This should also help prevent future listings of species that might be in decline.

While the notion of increased blacktailed prairie dogs in North Dakota still remains somewhat blurry, with educational efforts, applied research, time and patience, the situation should improve. We believe this plan is a good starting point. What comes next depends on attitudes, funds for prairie dog management, and the public's desire for increased prairie dog acreage.

JEB WILLIAMS is a biologist with the Department's conservation and communications division.

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